

Future Flight Design			
2009 Science			
Core Curriculum			
Iowa Science			
Grades 3-5			
Activity/Lesson	State	Standards	
Air Transportation Problem	IA	SCI.3-5.1.5.1	Mathematics is used to gather, organize and present data and to construct convincing explanations.
Air Transportation Problem	IA	SCI.3-5.1.7.1	Students should communicate, critique, and analyze their work and the work of other students.
Air Transportation Problem	IA	SCI.3-5.1.7.2	Students should share procedures and explanations through various means of communication.
Aircraft Design Problem	IA	SCI.3-5.3.5.1	The motion of an object can be described by its position, direction of motion, and speed. That motion can be measured and represented on a graph.
Aircraft Design Problem	IA	SCI.3-5.3.5.2	Changes in speed or direction of motion are caused by forces. The greater the force, the greater the change in motion. The more massive an object, the less effect a given force will have in changing its motion.
Future Flight Design			
2009 Science			
Core Curriculum			
Iowa Science			
Grades 6-8			
Activity/Lesson	State	Standards	
Air Transportation Problem	IA	SCI.6-8.1.2.4	Students formulate questions, design investigations, execute investigations, interpret data, use evidence to generate explanations, propose alternative explanations, and critique explanations and procedures.
Air Transportation Problem	IA	SCI.6-8.1.4.1	The use of tools and techniques, including computers, will be guided by the questions asked and the investigations students design. Students should be able to access, gather, store, retrieve, and organize data, using computer hardware and software designed for these purposes.
Air Transportation Problem	IA	SCI.6-8.1.5.1	Mathematics is used to gather, organize and present data and to construct convincing explanations.
Air Transportation Problem	IA	SCI.6-8.1.7.2	Students should be able to review data from an experiment, summarize the data, and form a logical argument between cause and effect relationships.

Air Transportation Problem	IA	SCI.6-8.1.9.1	Students should become competent in communicating experimental methods, describing observations and summarizing the results of investigations. Explanations can be communicated through various methods.
Aircraft Design Problem	IA	SCI.6-8.3.3.1	The motion of an object can be described by its position, direction of motion, and speed. That motion can be measured and represented on a graph.
Aircraft Design Problem	IA	SCI.6-8.3.3.3	If more than one force acts on an object along a straight line, then the forces will reinforce or cancel one another, depending on their direction and magnitude. Unbalanced forces will cause changes in speed or direction of an object's motion.